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| 10/578,147 | 03/23/2007 | Rene Chiocca | 434299-695 | 8817 |
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| Nixon Peabody LLP | | | CHANG, HANWAY | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,147

Applicant(s)

CHIOCCA, RENE

Examiner

Hanway Chang

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2009.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05/03/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SI.08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/19/2009 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., temporary storage) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues the container cited by Güldner et al. (US Pat. 4,836,975, hereinafter Güldner) does not teach drainage of water from the outer container. However, as cited in the non-final rejection on 06/17/2009, the plunger tube (14) is used to fill and evacuate the chamber (37) in the outer container (2) (see col. 3, lines 50-53).

Applicant further argues that Güldner does not teach or suggest a loading opening for receiving the solid nuclear fuel. However, Güldner discloses plunger tube (13) is used to fill the inner container with radioactive substances.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Güldner.

Regarding claims 1 and 17, Fig. 1 of Güldner discloses a nuclear container comprising an inner leak tight receptacle (4) including a loading opening (13) for receiving and conditioning nuclear fuel assemblies (see col. 3, lines 44-47); and an outer leak tight receptacle (2) that contains the inner leak tight metallic receptacle (4) (see col. 2, lines 65-4), the outer leak tight receptacle (2) at least including a bottom and an open end (see col. 3, lines 5-10), such that when the inner leak tight metallic receptacle is located in the outer receptacle (2), a passage (14) remains free between the two receptacles (2 and 4) from the open end to the bottom of the outer receptacle, the passage including means for draining water from the outer receptacle (2) and/or for controlling the leak tightness of the outer receptacle (2) (see col. 3, lines 50-56). The embodiment of Güldner does not explicitly disclose that the inner leak tight receptacle (4) is metallic. However, Güldner does disclose in the background of the invention that steel tubes have been used before (see col. 1, lines 10-17) to absorb neutrons. In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to steel tubes as mentioned in the background of the invention for the purpose of absorbing neutrons as taught. Further, Güldner does not explicitly disclose the nuclear fuel is a solid. However, in the background of invention, Güldner discloses that the nuclear fuel may be liquid and/or fissionable substances (see col. 1, lines 35-40). Therefore the nuclear fuel may be a solid. In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to

modify the invention of Gldner by having the nuclear fuel be a solid for the purpose of having the device be more applicable to the storage of common nuclear substances.

Regarding claims 2 and 14, Fig. 1 of Gldner discloses that the inner receptacle (4) is adjusted in the outer receptacle (2) (see col. 2, lines 65-4).

Regarding claim 3, Fig. 1 of Gldner discloses that the passage (14) is a duct located in the inner receptacle (4) leading to the outside (see col. 3, lines 50-59). It should be noted that the passage is within the boundaries of the inner receptacle (4).

Regarding claim 4, Fig. 2 of Gldner discloses the inner receptacle (4) and the duct (14) of which are cylindrical-shaped with a circular cross section (see col. 3, lines 22-53).

Regarding claim 5, Fig. 2 of Gldner discloses the duct (14) is located on the centerline of the inner receptacle (4) (see Fig. 2).

Regarding claim 6, Fig. 1 of Gldner discloses the inner receptacle (4) is cylindrical-shaped (see col. 2, lines 65-68) and the outer receptacle (2) comprises a protuberance (6) delimiting the passage (14) (see col. 3, lines 50-59).

Regarding claim 7, Fig. 1 of Gldner discloses a shielded plug (6) that can be fixed in a leak tight manner to the open end of the inner receptacle (4) and such that the passage (14) passes through the plug (6) (see col. 3, lines 10-59).

Regarding claim 8, Fig. 1 of Gldner discloses the at least one closing plate (6) that can be assembled such that the inner receptacle (4) is leak tight (see col. 3, lines 7-21).

Regarding claim 9, Fig. 1 of Güldner discloses the outer receptacle (2) comprises a leak tight cover (6) and means for draining (14) the outer receptacle (2) and/or controlling its leak tightness, capable of facing the passage (14) when the inner receptacle (4) is placed in the outer receptacle (2) (see col. 3, lines 7-59).

Regarding claims 10 and 19, Fig. 1 of Güldner discloses the means for draining (14) the outer receptacle (2). Güldner does not explicitly disclose that the means for draining (14) is a dip tube. However, Güldner does disclose that the tube (14) operates very closely to a dip tube as normally operated in the art of the invention at the time the invention was made (see col. 4, lines 5-25).

Regarding claim 11, Fig. 1 of Güldner discloses the outer receptacle (2) is a storage package for which the sidewalls (2a) are radiation shielding (see col. 2, lines 61-4).

Regarding claim 12, Fig. 1 of Güldner does not explicitly disclose that the outer receptacle (2) is a metallic leak tight receptacle for conditioning of nuclear fuel assemblies (see col. 2, lines 65-69). However, Güldner does disclose in the background of the invention that steel tubes have been used before (see col. 1, lines 10-17) to absorb neutrons. In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to steel tubes as mentioned in the background of the invention for the purpose of absorbing neutrons as taught.

Regarding claims 13, 15, 21, and 23, Güldner does not explicitly disclose a transfer package for which the sidewalls are radiation shielding and capable of containing the outer receptacle (2). However, it would have been obvious at the time of

invention to a person of ordinary skill in the art to have a transfer package capable of containing the outer receptacle and having sidewalls are radiation shielding (such as a metal/concrete barrel) for the purpose of safely moving the radioactive material.

Regarding claim 16, Güldner does not explicitly disclose a seal is used to ensure leak tightness between the outer receptacle (2) and the transfer package. However, it would have been obvious at the time of invention to a person of ordinary skill in the art to make the containers be sealed to ensure the containers to be leak tight for the purpose of safely storing the radioactive material.

Regarding claim 18, Fig. 1 of Güldner discloses that the outer receptacle (2) is drained through the same end of the outer receptacle (2) as the confinement of the inner receptacle (4) (see col. 3, lines 50-59).

Regarding claims 20 and 22, Fig. 1 of Güldner does not explicitly disclose that the confinement is performed by welding of at least one closing plate. However, Güldner discloses that the inner and outer receptacles (4, 2) are leak tight (see abstract). Furthermore, it would have been obvious at the time of invention to a person of ordinary skill in the art to weld at least one closing plate for the purpose of making the containers be sealed to ensure the containers to be leak tight for the purpose of safely storing the radioactive material.

Regarding claim 24, Fig. 1 of Güldner discloses a receptacle for conditioning solid nuclear fuel assemblies comprising a non-removable bottom and an open end (see col. 3, lines 5-10), and further comprising a duct (14) opening up in the non-removable bottom (see col. 3, lines 50-59), the duct (14) enabling drainage of water

from between an adjusted receptacle (2) positioned within the metallic receptacle, and the metallic receptacle (see col. 3, lines 50-59).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanway Chang whose telephone number is (571)270-5766. The examiner can normally be reached on Monday to Friday 7:30 AM till 4 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jack I. Berman/
Primary Examiner, Art Unit 2881

Hanway Chang
December 30, 2009
/H. C./
Examiner, Art Unit 2881